

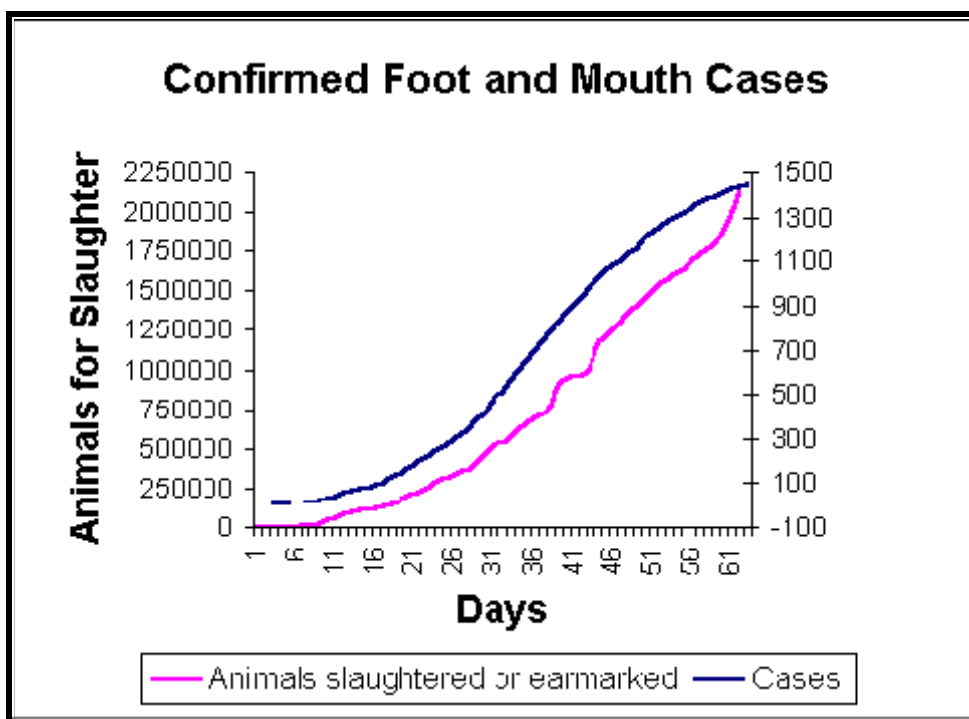
**COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES  
PUBLIC HEALTH - DISEASE CONTROL PROGRAMS**

**VETERINARY PUBLIC HEALTH AND RABIES CONTROL**

**Foot-and-Mouth Disease Holding On**

A computer model designed to track nuclear fallout in the aftermath of the Chernobyl disaster has proven crucial to the British government's efforts to predict and prevent the spread of the foot-and-mouth epidemic. The software has allowed scientists to draw up a unique footprint for each outbreak, showing the direction and distance over which the virus can disperse on the wind. The maps take into account weather conditions and local geographical features. Such information has been used to develop firebreak policy.

The Government hopes that by June 6, the day before the expected general election, there may be only one new case a day (Graph 1). Leading veterinarians and farmers disagree. They expect the epidemic to last far beyond July and perhaps until the end of the year. Residents have safety concerns about the community's health from the pyres and rotting carcasses and have met with officials to argue their case.



**Graph 1**

There are close to 1500 confirmed cases of FMD. Three percent of Great Britain's livestock have been slaughtered or earmarked for slaughter to control the epidemic. The average number of daily cases is now 16, compared with 43 just over two weeks ago.

American tourists may choose not to return to Britain after the FMD outbreak for up to four years. Foreign tourism was down by 30 percent over the Easter holidays. Culture Secretary, Chris Smith, was worried that the American market could take a long time to recover. American visitors form the core of the UK's tourism market. European tourists were expected to take a far less sensitive approach over returning to Britain. The government also sought to reassure the public that burning pyres of animals were not causing a health risk. On the other hand, a report by the National Environmental Technology Center claimed the pyres were emitting higher levels of polluting dioxins than all the country's factories combined.

Meanwhile, the vaccination debate continues to rage on. Farm leaders argue it would destroy public confidence in meat and drive farmers out of business. The National Farmers' Union (NFU) held talks with the government about whether to begin a limited vaccination program in the worst hit areas and before animals are put out to spring pasture. The government must have the cooperation of the farmers, which appears unlikely at this time.

### **UK Refused US Foot-and-Mouth Tests at Start of Epidemic**

The Ministry of Agriculture reportedly turned down a U. S. offer, made at the beginning of the foot-and-mouth outbreak, of a simple, reliable test which could have avoided the needless culling of more than a million healthy animals, according to one of the world's experts on the disease. Professor Fred Brown, former deputy head of the world foot-and-mouth research laboratory at Pirbright and now at the United States Animal Disease Center, feels too many healthy animals have been slaughtered. He favors an immediate vaccination policy.

### **Some UK Quarantines Eased**

On April 20, FMD restrictions were lifted in two English counties, affecting more than 1,000 farms, as the government insisted the epidemic was under control. It is the first time any restrictions have been lifted since the epidemic broke out in February and came as the number of confirmed cases exceeded 1,400. With more than 2.1 million animals condemned and the Ministry of Agriculture killing 35,000 animals a day, there is still a two-week slaughtering backlog. Downing Street said the backlogs of animals waiting slaughter and disposal were significantly smaller than previously thought.

### **Cost of FMD Could Double by July**

Last week, the Institute of Directors reported the cost of FMD could double if the epidemic drags on until July. The Institute, which represents 54,000 businesses, said the Government faced a huge demand for assistance across a wide spectrum of industry and commerce. The worst hit sectors were hotels, restaurants and distribution companies.

### **Ministry of Agriculture May Be Abolished**

It was reported in newspapers this week that Prime Minister Tony Blair may cull the Ministry of Agriculture following the foot-and-mouth disease outbreak and replace it with a new department of rural affairs to fundamentally reform farming. Less emphasis would be placed on promoting intensive farming which several blame for the rapid spread of FMD.

### **British Meat Faces Three-year Export Ban**

Britain may not be allowed to trade its meat or livestock with the rest of the world for at least three years. The delay would be largely the same regardless of whether or not the UK decides on selective vaccination to bring down the number of livestock that were killed. Farmers were assuming that if the last FMD case occurs towards the end of the year, it would mean opening up trade in about 18 months. Nonetheless, an extensive program of serological surveillance, and examinations will be needed to prove to the UK's trading partners that the UK is free of the disease.

### **Policy of Immediate Slaughter Modified**

Alarmed that thousands of animals were being slaughtered unnecessarily, the Ministry of Agriculture quietly dropped its policy of killing all animals on farms next to infected premises within 48 hours. With the epidemic on the wane, and a backlog of condemned animals to be slaughtered, this cautious approach is expected to save many pedigree animals. There is concern that a few cases in sheep resulted in large numbers of healthy, valuable cattle being killed. The March 23 policy held that all animals suspected of having FMD must be killed within 24 hours and animals on neighboring farms within 48 hours. Those targets had never been met. Previously, when veterinarians found a suspect case, they decided on instant slaughter. Now veterinarians must be certain before ordering slaughter and animals must be given "the benefit of the doubt" until confirmation comes though.

### **Protesters Active**

Protests against the FMD mass slaughter policy erupted in London, Gloucester and the Netherlands Saturday. A crowd of several hundred animal rights protesters outside Downing Street were concerned that the public had been misled over the possibilities for halting the outbreak. Several of the protesters demanded an immediate end of the mass slaughter policy, which has led to the culling of almost two million animals, and a start to vaccination.

Protesters at Wilddrington in Northhumberhland prevented vehicles from entering the Memscott Hill site where some 400 carcasses a day are being dumped onto an enormous pyre. Families blockaded lorries carrying infected carcasses to a FMD disposal site Friday. Their action came amid increasing anxiety about the environmental and health effects of the slaughtering operation. The families are fearful of the effects on children of the acrid smoke that drifts into their homes each day. Villagers at nearby Linton attended a packed public meeting in the parish hall on Thursday evening to voice their concerns over what they described as "a criminal lack of concern for public health".

In the Hague, thousands of people were also demonstrating against the European Union and Dutch government policies of mass slaughter. They protested the “immoral” culling of healthy animals, and the authorities’ refusal to start a comprehensive vaccination program.

### **UK Ignored FMD Warnings**

Environmental campaigners have accused the UK of failing to act on repeated warnings about FMD risks. The charge came from Friends of the Earth (FoE), which says ministers received several authoritative warnings. FoE is asking Prime Minister, Tony Blair, why the government did not act, and is urging a public inquiry into the outbreak’s causes and the response to it. The government says it received no specific warnings. FoE responded that the government received repeated warnings that intensive farming and large-scale animal movements would seriously increase the risk of FMD and other transmissible diseases. Some of the warnings mentioned by the group since 1997:

- ! In 1998, the UN Food and Agriculture Organization (FAO) said Europe was especially vulnerable to livestock diseases because of the large-scale animal movements within the European Union, as well as the high density of animals on European farms.
- ! In 1999 the EU scientific committee on animal health and welfare said the EU was at “extraordinarily high” risk of FMD because of the presence of the disease in countries bordering the EU

### **Early Vaccination Key to Eradication**

Critics of the FMD program, claim the epidemic would have been contained much more effectively if a vaccination program had been launched at the start of the outbreak. Scientists at Edinburgh University studied 60 FMD outbreaks around the world in the past decade and found that a combination of slaughter and vaccination proved the best way to control the disease. The extent of FMD could determine the scale of a vaccination program. All the non-vaccinating countries, which used a combination of vaccination and slaughter, succeeded in controlling the virus within 42 days of the first outbreak. By contrast, half the non-vaccinating countries that opted for slaughter only took longer than 40 days to contain the epidemic.

The government did favor a limited vaccination program, however the National Farmers’ Union opposed it. Yet the Soil association was joined by the Friends of the Earth, the National Trust and Royal Society for the Protection of Birds in calling for vaccination.

### **Dioxin Fears Over Disposal of Carcasses**

Concerns are being voiced about the effect on the environment of both burning and burial of animal slaughtered in the FMD cull. Pyres have been burning continuously for several weeks. The Department of Health decided to dismantle a pyre of approximately 750 sheep and cows in Cumbria and bury the carcasses instead because the pyre is close to a residential area.

Fears were raised by a National Environmental Technology Center (NETC) report showing that pyres used for incineration were emitting high levels of toxic dioxins. The NETC study, found that in the first six weeks of

the crisis, the burning of 500,000 animals had release 63 grams of dioxins. This compares to the 88 grams released into the atmosphere each year by all of Britain's most polluting factories combined. Pressure group FoF has called for the burning to immediately stop. Defense Secretary Geoff Hoon said public health was "uppermost" in the government's mind and added no reckless action was taken.

### **Rotting Carcasses Pose Health Risk**

Farmers in Devon are concerned about the growing public health risk posed by thousands of rotting carcasses that are to remain unburied for two weeks. A mass burial site in north Devon, will not be ready for fourteen days, leaving few options for the disposal of up to 174,660 dead animals in county fields and farmyards. Many of the 174,660 animals have been lying in fields for more than a week and were in advanced stages of decomposition. There is a dispute between the Environment agency and the Ministry of Agriculture on disposal of animals. Farm leaders in Devon said the situation was out of control and the stench of rotting flesh was "overpowering and utterly revolting".

### **Flock Condemned by Satellite Positioning Error**

A veterinarian and two soldiers arrived and pronounced a death sentence on the sheep and the family's pet pig. The children were sent away and the slaughter began. However, the April 20 slaughter was a mistake. It was discovered after another farmer telephoned the Ministry of Agriculture to say there had been not outbreak in the area. Later officials realized the grid reference was wrong by one digit despite using a satellite global positioning system. They should have been slaughtering animals 100 miles away. The farmer, Mr. Nuttall, plans to sue the ministry for gross incompetence, even though officials have promised the man he will receive similar compensation to farmers whose animals are affected by the disease.

### **Army Fears Livestock Being Moved Illegally**

Police are investigating whether farmers moving animals illegally may have caused a number of isolated outbreak outside the restricted area in Cumbria. Cumbria police said they had 24 hour patrols out watching for anyone moving animals illegally and a "number of cases" had been referred for prosecution. Brigadier Alex Birtwistle, head of the Army's operation in Carlisle, said the disease appeared to have moved along roads, which indicate that animals might be being move "illegally or accidentally" out of the zone. The possibly of FMD being transmitted by air is being investigated by equipment similar to that which provided early warnings of Iraqi biological attacks in the Gulf war.

### **FMD Spreads to Wild Deer?**

On April 22, it was learned that FMD may have passed into Britain's wild deer population, perhaps making the policy of mass slaughter of livestock futile. There have been several cases of veterinarians clinically identifying the disease in wild deer, some of which died. Reports have been received from Devon, Cumbria and Northumberland of deer limping and exhibiting other unusual behavior. Veterinary experts say it is impossible to vaccinate or cull wild deer and once infected they will act as a reservoir for the virus, repeatedly

re-infecting livestock.

The Ministry of Agriculture has tested several deer, all of which were negative. However, the government has used an Elisa test, which was developed on cattle and sheep, and it is not thought to be highly sensitive on deer. In 1974, the Animal Health Institute kept a number of deer in proximity to sheep with FMD for two hours in a controlled experiment. All six native species of deer contracted the disease, and several died. The ministry is considering lifting the ban on deer-stalking to provide carcasses for FMD testing.

In California, during the summer of 1924, FMD invaded the Stanislaus National Forest. Hunters were hired to destroy possibly infected deer. More than 22,000 deer were destroyed and 2,279 were shown to be infected.

### **Ministers Accused of Putting Historic Deer in Danger**

Ministers have been accused of putting a historic herd of deer belonging to the Queen in danger from FMD as part of the Government's attempts to show that the crisis is under control. The Royal Parks Agency was ordered to reopen two parks that were closed to protect the herd, which has a bloodline tracing back to the Middle Ages. The parks are used by thousands of motorists each day as a rush-hour shortcut into London, as well as by cyclists and walkers. A third deer park was also reopened at the Government's insistence in time for the Easter holiday. The decisions went against the park managers' recommendations to keep the parks closed until FMD was eradicated.

### **Farmer Found Hanged After Cull**

A farmer was found hanged in his barn just days after his livestock were slaughtered in the FMD battle. The 59-year-old man raised cattle and sheep in Wales. He was devastated last week when some of his healthy beef cattle were slaughtered as part of the livestock welfare disposal scheme. The program was a voluntary cull aimed at helping farmers unable to move stock because of restrictions. Three weeks ago another farmer from Powys was found dead in what was believed to be a FMD related suicide.

### **Possible Human Case**

The first possible human FMD case was feared last weekend in a slaughter man in Cumbria. Health Department confirmatory tests are not expected until next week. Although rare, FMD in people is possible. The suspected victim's main worry is that farmers in his native Cumbria may be reluctant to employ him once he recovers. However, Britain's tourism board scrambled to instill confidence among visitors as the industry reeled from the blow of a suspected human case of FMD. Sandie Dawe, director of marketing at the British Tourist Authority, said the industry expected to lose \$3.6 billion this year alone as foreign visitors stay away, and it could take years to get them back again.

There was one recorded human case of FMD in Britain's 1966-67 outbreak. The man suffered no long-

lasting health effects. The patient developed a mild temperature, a sore throat, blisters on the palms of his hands and weals on his tongue.

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